



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,388	07/29/2002	Ronald Holzwarth	D3299-00016	3754

7590 12/05/2003

Darius C Gambino
Duane Morris & Heckscher
One Liberty Place
Philadelphia, PA 19103-7396

EXAMINER

AL NAZER, LEITH A

ART UNIT	PAPER NUMBER
----------	--------------

2828

DATE MAILED: 12/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/936,388

Applicant(s)

HOLZWARTH ET AL.

Examiner

Lith A Al-Nazer

Art Unit

2828

AW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-15 and 20-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-15 and 20-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Paul IP
PAUL IP
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 8, 11, and 29-31 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only and cannot depend from any other multiple dependent claim. See MPEP § 608.01(n).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 5-15 and 20-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Kafka et al '698.

With respect to claims 5-15 and 32-36, Kafka teaches an active medium (12), a plurality of resonator mirrors with an incoupling mirror (16) for the coupling in of pump light to the active medium, an outcoupling mirror (20) for the output of light pulses and several tilted mirrors (14 and 16), and a compensating mechanism (22 and 24) for the compensation of the of the group velocity dispersion of the light pulses, wherein the resonator configuration includes a dispersion setting device (60; column 1, lines 40-50) for the introduction of a linear dispersion into the light path of the resonator configuration.

Art Unit: 2828

With respect to claim 20, Kafka teaches the system being constructed as a ring laser (figure 1).

With respect to claims 21-23 and 26-29, Kafka teaches a resonator length setting device being provided for the change of the resonator length through a change in positioning of one of the tilted mirrors (column 8, lines 33-44). Other patents also teach adjusting the resonator length through a change in position of one of the tilted mirrors.

With respect to claim 24, Kafka teaches a reference laser and possibly multiplier or divider stages being provided for the generation of the reference frequency and the device for the production of the beat signal includes a photosensitive element (22).

With respect to claim 25, Kafka teaches a filter element (26) for spectral selective detection of the light pulses being provided at the photosensitive element.

With respect to claim 30, Kafka teaches a solid or dye medium (column 3, lines 1-10).

With respect to claim 31, Kafka teaches a device being provided for self phase modulation (86; column 7, lines 45-65).

Response to Arguments

4. Applicant's arguments filed October 10, 2003 have been fully considered but they are not persuasive.

Applicant argues that Kafka et al '698 does not have any components capable of introducing a predetermined linear dispersion. Applicant specifically points out that elements 54, 56, and 60 of Kafka are not capable of introducing a predetermined linear dispersion.

Applicant states, "With regard to the novelty of the claimed invention it is important to

Art Unit: 2828

emphasize that the introduction of linear dispersion influencing single modes of a light pulse is impossible with the Kafka technique. As an example, the function of the mirror 34 shown in Figure 1 of the present patent application cannot be fulfilled by any optical component described by Kafka.” Examiner disagrees. Kafka discloses a tiltable mirror 60 in figure 3c. Examiner believes that this element is capable of performing the same functions of the tiltable mirror 34 of the present application. Specifically, Examiner believes that the tiltable mirror 60 of Kafka is capable of the introduction of linear dispersion influencing single modes of a light pulse.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2828

Communication Information

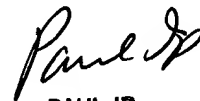
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leith A Al-Nazer whose telephone number is 703-305-2717.

The examiner can normally be reached on Monday-Friday 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on 703-308-3098. The fax phone number for the organization where this application or proceeding is assigned is 703-308-7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-3329.

LA



PAUL IP
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800